AMENDMENTS TO THE CLAIMS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

- 1. (Currently amended) A method for predicting irritant potential of a candidate substance comprising:
 - a) providing a mammalian <u>keratinocyte</u> cell that releases a <u>nucleotideATP</u> and/or

 <u>ADP</u> in response to an inflammatory agent;
 - b) culturing said <u>mammalian keratinocyte</u> cell with a candidate substance; and
 - c) determining nucleotide ATP and/or ADP release from said mammalian keratinocyte cell,

wherein an increase in <u>nucleotideATP and/or ADP</u> release from said <u>mammalian</u> <u>keratinocyte</u> cell, as compared to <u>nucleotideATP and/or ADP</u> release in the absence of said candidate substance, indicates that said candidate substance is an irritant.

- 2. (Canceled) The method of claim 1, wherein said cell is a fibroblast.
- 3. (Canceled) The method of claim 1, wherein said cell is a keratinocyte.
- 4. (Currently amended) The method of claim [[3]]1, wherein said cell is a human keratinocyte.
- 5. (Currently amended)The method of claim [[3]]1, wherein said cell is a mouse keratinocyte.
- 6. (Original) The method of claim 5, wherein said cell is a PAM 212 cell.
- 7. (Canceled) The method of claim 1, wherein said nucleotide is ATP and/or ADP and/or AMP, UTP and/or UDP and/or UMP, CTP and/or CDP and/or CMP, TTP and/or TDP and/or TMP, or GTP and/or GDP and/or GMP.

- 8. (Canceled) The method of claim 1, wherein said nucleotide is ATP and/or ADP and/or AMP.
- 9. (Canceled) The method of claim 1, wherein said nucleotide is UTP and/or UDP and/or UMP.
- 10. (Original) The method of claim 1, wherein determining nucleotide release from said cell comprises measuring nucleotide concentration in the cell culture medium.
- 11. (Original) The method of claim 10, wherein measuring nucleotide concentration comprises an enzymatic assay.
- 12. (Original) The method of claim 11, wherein said enzymatic assay is a luciferin-luciferase assay.
- 13. (Withdrawn) The method of claim 10, wherein measuring nucleotide concentration comprises thin layer chromatography.
- 14. (Original) The method of claim 1, wherein said candidate substance is a naturally-occurring compound.
- 15. (Original) The method of claim 1, wherein said candidate substance is a man-made compound.
- 16. (Original) The method of claim 1, further comprising measuring nucleotide release from said cell in the absence of said candidate substance.
- 17. (Original) The method of claim 1, further comprising a control comprising:
 - a) contacting said cell with a known irritant; and
 - b) measuring nucleotide release from said cell.

18-143. (Canceled)